

**IN THE CLAIMS:**

Please amend claims 1-4, as follows:

- 1 1. (Currently amended) A leak point wetness sensor for urological investigations  
2 comprising:  
3 an instrument body having a passage therethrough to pass a catheter,  
4 which catheter is intended for insertion into the bladder through the urethra;  
5 a receptacle in said instrument body so arranged and disposed as to receive  
6 liquid which leaks from the urethra past the inserted catheter;  
7 a temperature sensitive detector sensor mounted to said instrument body  
8 where it will be contacted by said leaked liquid, said detector sensor being responsive to  
9 the temperature of said liquid and adapted to provide a signal output respective to said  
10 temperature;  
11 a circuit adapted to generate and provide a reference output simulative of a  
12 selected temperature below that of an anticipated temperature of said leaked liquid, said  
13 circuit generating said reference output independent of ambient temperature; and  
14 a comparator responsive to the difference between said outputs to detect  
15 and inform when the signal output sufficiently exceeds said reference output.

- 1 2. (Currently amended) ~~Apparatus~~ The sensor according to claim 1 in which drain-  
2 age channels extend from said receptacle to the outside of said body to drain liquid from  
3 the receptacle.

1 3. (Currently amended) ~~Apparatus~~ The sensor according to claim 1 in which re-  
2 corder means records related data when wetness is detected.

1 4. (Currently amended) A leak point wetness sensor for urological investigations  
2 comprising:

3 an instrument body having a passage therethrough to pass a catheter,  
4 which catheter is intended for insertion into the bladder through the urethra;

5 a receptacle in said instrument body so arranged and disposed as to receive  
6 liquid which leaks from the urethra past the inserted catheter;

7 a temperature sensitive detector sensor mounted to said instrument body  
8 where it will be contacted by said leaked liquid, said detector sensor being responsive to  
9 the temperature of said liquid and adapted to provide a signal output respective to said  
10 temperature;

11 a circuit adapted to ~~respond to~~ detect a rate of change a in the signal output  
12 from said temperature sensitive detector sensor, said detected rate of change correspond-  
13 ing to a rate of change in temperature at said detector sensor. temperature of said leaked  
14 fluid when said change occurs at a rate indicative of contact with leaked liquid whose  
15 temperature approaches that of a human body.

Kindly add the following new claims 5 et seq.

1 5. (New) The sensor according to claim 1, wherein said comparator outputs a sig-  
2 nal indicating that liquid has leaked from said urethra.

1 6. (New) The sensor according to claim 4, wherein said circuit generates a signal  
2 indicating that liquid has leaked from said urethra.

1 7. (New) The sensor according to claim 4, wherein said circuit differentiates said  
2 signal output from said temperature sensitive detector sensor.

1 8. (New) A leak point wetness device for urological investigations comprising:  
2 an instrument body having a passage therethrough to pass a catheter,  
3 which catheter is intended for insertion into the bladder through the urethra;  
4 a temperature sensitive detector sensor mounted to said instrument body  
5 where it will be contacted by liquid which leaks from the urethra past the inserted cathe-  
6 ter, said detector sensor being responsive to the temperature of said liquid and adapted to  
7 provide a signal output respective to said temperature;  
8 a circuit adapted to generate and provide a reference output simulative of a  
9 selected temperature below that of an anticipated temperature of said leaked liquid, said  
10 circuit generating said reference output independent of ambient temperature; and

11                   a comparator responsive to the difference between said outputs to detect  
12   and inform when the signal output from said detector sensor sufficiently changes relative  
13   to said reference output.

1    9.     (New) A leak point wetness device for urological investigations comprising:  
2                   an instrument body having a passage therethrough to pass a catheter,  
3   which catheter is intended for insertion into the bladder through the urethra;  
4                   a temperature sensitive detector sensor mounted to said instrument body  
5   where it will be contacted by liquid which leaks from the urethra past the inserted cathe-  
6   ter, said detector sensor being responsive to the temperature of said liquid and adapted to  
7   provide a signal output respective to said temperature; and  
8                   means for detecting when the signal output from said detector sensor suf-  
9   ficiently changes relative to a reference signal that is independent of ambient temperature  
10   and simulative of a selected temperature below that of an anticipated temperature of said  
11   leaked liquid.

1    10.    (New) The device according to claim 9, further comprising:  
2                   means for signaling the event of a leakage when the signal output from  
3   said detector sensor sufficiently changes relative to said reference signal.

1    11.    (New) The device according to claim 9, further comprising:

2 means for generating said reference signal that is independent of ambient  
3 temperature and simulative of a selected temperature below that of an anticipated tem-  
4 perature of said leaked liquid.

1 12. (New) A leak point wetness device for urological investigations comprising:  
2 an instrument body having a passage therethrough to pass a catheter,  
3 which catheter is intended for insertion into the bladder through the urethra;  
4 a temperature sensitive detector sensor mounted to said instrument body  
5 where it will be contacted by liquid which leaks from the urethra past the inserted cathe-  
6 ter, said detector sensor being responsive to the temperature of said liquid and adapted to  
7 provide a signal output respective to said temperature; and  
8 a circuit adapted to detect a rate of change in the signal output from said  
9 temperature sensitive detector sensor, said detected rate of change corresponding to a rate  
10 of change in temperature at said detector sensor.